

Lower tacrolimus doses is suitable for living donor liver transplantation with small-for-size graft

August 26 2009

Several studies have shown that living donor liver transplant (LDLT) recipients required smaller doses of tacrolimus compared with deceased donor liver transplant (DDLT) patients, which indicated that liver regeneration could affect the metabolism of tacrolimus in LDLT. In recent years, living donor liver transplantation in adult patients with SFS liver grafts has become increasingly accepted. However, there are few studies in the existing literature on tacrolimus dosage requirements in LDLT with SFS grafts which require adequate liver regeneration.

A research article to be published on August 21, 2009 in the *World Journal of Gastroenterology* addresses this question. The research team led by Professor Li from the Center of Liver Transplantation of Sichuan University collected the medical data from the Center of Liver Transplantation in West China Hospital of Sichuan University, which is one of the biggest centers for liver transplantation in China, to study tacrolimus dosage requirements and blood levels in LDLT recipients with SFS grafts.

Previous studies have indicated a high variability of the optimal tacrolimus dose in LDLT. The current article further investigates the tacrolimus dosing requirements in SFS graft by comparing tacrolimus dosage requirements in patients who received a graft with adequate hepatic mass (Group N) and in patients who received a SFS graft (Group S) in LDLT.

The result of their study revealed that there was no difference in demographic characteristics, acute rejection rates, liver and renal function test results, or the number of potentially interacting medications administered between the groups. Moreover, Professor Li and colleagues recommended that relatively low tacrolimus doses should be administered to patients who receive living donor liver transplantation with SFS liver grafts.

The tacrolimus dosage requirements and blood levels in LDLT with SFS grafts were reported by Professor Li and colleagues in China, which have been previously neglected. These results demonstrate that low doses of tacrolimus may be required in SFS grafts in living donor [liver transplantation](#), which will be a good guideline to follow for rational administration of tacrolimus in future LDLT recipients with SFS grafts.

More information: Liu F, Li Y, Lan X, Wei YG, Li B, Yan LN, Wen TF, Zhao JC, Xu MQ, Wang WT, Yang JY. Tacrolimus dosage requirements in living donor [liver](#) transplant recipients with small-for-size grafts. *World J Gastroenterol* 2009; 15(31): 3931-3936; www.wjgnet.com/1007-9327/15/3931.asp

Source: World Journal of Gastroenterology ([news](#) : [web](#))

Citation: Lower tacrolimus doses is suitable for living donor liver transplantation with small-for-size graft (2009, August 26) retrieved 10 April 2024 from <https://medicalxpress.com/news/2009-08-tacrolimus-doses-suitable-donor-liver.html>

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